

# 20-2362 FR FLAME RETARDANT POLYURETHANE POTTING & ENCAPSULATING COMPOUND UL 94 V-0 Listed

## DESCRIPTION:

The 20-2362FR potting and encapsulating compound has been formulated to meet the stringent non-burning requirements of UL 94 V-0. 20-2362FR is listed with Underwriter's Laboratory for passing UL 94 V-0. This system offers a unique combination of properties. 20-2362 is very low in viscosity, flame retardant, has a glass transition temperature of -72°C, and has low moisture permeability. This product forms a soft elastomer that will cushion and protect sensitive electronic components.

## FEATURES:

Flame Retardant - **UL 94 V-0 listed**

Low Viscosity  
Low Durometer

Low Shrinkage & Exotherm  
Excellent Moisture Resistance

Maintains Flexibility at Low Temperatures  
RoHS and REACH compliant

## BENEFITS:

May be used in applications requiring FR

Quick self-leveling around components  
Low stress on components & vibration resistance

Will not damage components during cure  
Will not absorb H<sub>2</sub>O and can be used in wet environments

Can be used in very cold environments  
Finished products are export compliant

## TYPICAL PROPERTIES:

Color	Black
Specific gravity, @ 25°C	
Polyol	1.21
Isocyanate	1.24
Mix ratio, by weight mixed (P:I)	100:22
Hardness, Shore A	90
Pot life, 100 gram mass, 25°C	20 minutes
Viscosity, 25°C, cps	
Resin	7,500
Catalyst	315
Mixed	2,500
Coefficient of thermal expansion, per °C	2.28 x 10 <sup>-4</sup>
Tensile strength, psi	400
Elongation, %	40



Glass transition temperature, °C	-72
Dielectric constant, 25°C, 1 KHz	4.5
Surface resistivity, 25°C, ohm	$1 \times 10^{16}$
Volume resistivity, ohm-cm	$6 \times 10^{16}$
Operating temperature range, °C	-40 to +125

**INSTRUCTIONS FOR USE:**

1. Settling of fillers may occur. Mix polyol before using.
2. By weight, thoroughly mix 22 parts 20-2362 I (Isocyanate) to 100 parts 20-2362 P (Polyol). Two components should be carefully weighed in metal, plastic, or glass containers. Avoid using paper cups and wooden stirrers.
3. Mixed material can be degassed at 1 to 5 mm Hg to ensure bubble free castings. Containers should be large enough to allow frothing.
4. Cure according to one of the following cure schedules:  
25°C            24 Hours  
65°C            2 Hours  
80°C            60 Minutes

Note: When cured at room temperature, full hardness and final properties are achieved in 7-10 days.

**STORAGE & HANDLING & SAFETY:**

Store both components at 75-85F in original containers. If the containers are opened and the contents partially used, the material left in the container should be blanketed with dry nitrogen before sealing. Carefully read Material Safety Data Sheets before using.

**IMPORTANT:**

**EPOXIES, ETC. MAKES NO EXPRESS OR IMPLIED WARRANTIES OR MERCHANTABILITY, FITNESS OR OTHERWISE WITH RESPECT TO ITS PRODUCTS.** The information in this brochure is based on data obtained by our own research and is considered reliable. However, no warranty is expressed or implied regarding the accuracy of these data, the results to be obtained from the use thereof, or that any such use will not infringe any patent. The properties given are typical values and are not intended for use in preparing specifications. This information is furnished upon the condition that the person receiving it shall make his own tests to determine the suitability thereof for his particular purpose.

08/12